

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed. The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for each of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (USDA, 1999) and "Keys to Soil Taxonomy" (USDA, 1998) and in the "Soil Survey Manual" (USDA, 1993).

If soils are wet enough for a long enough period to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils in this survey area are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 1996).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units in the Hydric Soil Interpretations table meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 1996).

Map units that are made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

These map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
2: HEIL SILTY CLAY LOAM	HEIL	Yes	depression	2B3,3	YES	NO	YES
	BELFIELD	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
3: DIMMICK SILTY CLAY	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
	HEIL	Yes	depression	2B3,3	YES	NO	YES
	REGAN	Yes	flat	2B3,3	YES	NO	YES
4: GRAIL CLAY LOAM, 1 TO 3 PERCENT SLOPES	GRAIL	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
5C: WAYDEN SILTY CLAY, 2 TO 9 PERCENT SLOPES	WAYDEN	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
6B: VEBAR-PARSHALL FINE SANDY LOAMS, 1 TO 6 PERCENT SLOPES	VEBAR	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
7C: VEBAR-FLASHER FINE SANDY LOAMS, 3 TO 9 PERCENT SLOPES	VEBAR	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
7D: VEBAR-FLASHER COMPLEX, 9 TO 20 PERCENT SLOPES	VEBAR	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
8: BELFIELD-DAGLUM CLAY LOAMS, 1 TO 3 PERCENT SLOPES	BELFIELD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
8B: BELFIELD-DAGLUM CLAY LOAMS, 3 TO 6 PERCENT SLOPES	STRAW	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	HARRIET	Yes	depression	2B3,3	YES	NO	YES
9: REGENT SILTY CLAY LOAM, 1 TO 3 PERCENT SLOPES	HEIL	Yes	depression	2B3,3	YES	NO	YES
	RHOADES	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	SEN	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
9B: REGENT SILTY CLAY LOAM, 3 TO 6 PERCENT SLOPES	GRAIL	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
9C: REGENT-CABBA COMPLEX, 6 TO 9 PERCENT SLOPES	CABBA	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
10B: BEISIGL-LIHEN LOAMY FINE SANDS, 1 TO 6 PERCENT SLOPES	AMOR	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	BLANCHARD	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
11: MOREAU SILTY CLAY, 1 TO 3 PERCENT SLOPES	MOREAU	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
11B: MOREAU SILTY CLAY, 3 TO 6 PERCENT SLOPES	DAGLUM	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
12B: DAGLUM-RHOADES LOAMS, 1 TO 6 PERCENT SLOPES	BELFIELD	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	DOGTOTH	No	---	---	---	---	---
13: LAWTHER SILTY CLAY, 1 TO 3 PERCENT SLOPES	MOREAU	No	---	---	---	---	---
	SLICKSPOTS	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	HARRIET	Yes	drainageway	2B3	YES	NO	NO
	LAWTHER	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
14B: PARSHALL FINE SANDY LOAM, 1 TO 6 PERCENT SLOPES	SAVAGE	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
15: ARNEGARD LOAM, 1 TO 3 PERCENT SLOPES	ARNEGARD	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	REGAN	Yes	drainageway	2B3	YES	NO	NO
16: SHAMBO LOAM, 1 TO 3 PERCENT SLOPES	ARNEGARD	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
16: SHAMBO LOAM, 1 TO 3 PERCENT SLOPES	BOWDLE	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	SEN	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
16B: SHAMBO LOAM, 3 TO 6 PERCENT SLOPES	SHAMBO	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
17: CHAMA SILT LOAM, 1 TO 3 PERCENT SLOPES	MORTON	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	GOLVA	No	---	---	---	---	---
	SEN	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
17B: CHAMA SILT LOAM, 3 TO 6 PERCENT SLOPES	ARNEGARD	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	SEN	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	GOLVA	No	---	---	---	---	---
17C: CHAMA-CABBA SILT LOAMS, 6 TO 9 PERCENT SLOPES	DAGLUM	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
18: AMOR LOAM, 1 TO 3 PERCENT SLOPES	SEN	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
18B: AMOR LOAM, 3 TO 6 PERCENT SLOPES	CHAMA	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
18C: AMOR-CABBA LOAMS, 6 TO 9 PERCENT SLOPES	AMOR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
18D: AMOR-CABBA LOAMS, 9 TO 15 PERCENT SLOPES	VEBAR	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
19F: CABBA-CHAMA SILT LOAMS, 15 TO 70 PERCENT SLOPES	ARNEGARD	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
20F: FLASHER-BEISIGL- PARSHALL COMPLEX, 6 TO 70 PERCENT SLOPES, EXTREMELY STONY	REGAN	Yes	drainageway	2B3	YES	NO	NO
	LALLIE	Yes	depression	3, 2B3	YES	NO	YES
	SAVAGE	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
21B: RUSO FINE SANDY LOAM, 1 TO 6 PERCENT SLOPES	VEBAR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	RUSO	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
22: BOWDLE LOAM, 0 TO 3 PERCENT SLOPES	BOWDLE	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	LALLIE	Yes	depression	3, 2B3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
22B: BOWDLE LOAM, 3 TO 6 PERCENT SLOPES	BOWDLE	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	WANAGAN	No	---	---	---	---	---
24: STRAW LOAM, 0 TO 3 PERCENT SLOPES	---	---	---	---	---	---	---
	STRAW	No	---	---	---	---	---
	KORELL	No	---	---	---	---	---
	KORCHEA	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	LALLIE	Yes	oxbow	2B3, 3	YES	NO	YES
	RHOADES	No	---	---	---	---	---
25B: LIHEN LOAMY FINE SAND, 1 TO 6 PERCENT SLOPES	BELFIELD	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
26: REGAN LOAM, 0 TO 3 PERCENT SLOPES	AMOR	No	---	---	---	---	---
	REGAN	Yes	drainageway	2B3	YES	NO	NO
	ROLISS	Yes	depression	3, 2B3	YES	NO	YES
	ARVESON	Yes	depression	2B3	YES	NO	NO
	WYNDMERE	No	---	---	---	---	---
	HEGNE	Yes	flood plain	2B3	YES	NO	NO
	HARRIET	Yes	drainageway	3, 2B3	YES	NO	YES
27E: SINNIGAM-DAGLUM COMPLEX, 1 TO 25 PERCENT SLOPES	HEIL	Yes	depression	2B3, 3	YES	NO	YES
	SINNIGAM	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	FELOR	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
28: HARRIET LOAM	SAVAGE	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	HARRIET	Yes	flat	2B3	YES	NO	NO
	MCKENZIE	Yes	flat	2B3, 3	YES	NO	YES
	BELFIELD	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
29: KORCHEA LOAM, 0 TO 3 PERCENT SLOPES	REGAN	Yes	flat	2B3	YES	NO	NO
	KORCHEA	No	---	---	---	---	---
	VELVA	No	---	---	---	---	---
	LALLIE	Yes	depression	3, 2B3	YES	NO	YES
	STRAW	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	HARRIET	Yes	flat	2B3	YES	NO	NO

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
30: STRAW LOAM, CHANNELED	CHANNEL	Yes	---	4	NO	YES	NO
	STRAW	No	---	---	---	---	---
	KORCHEA	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
	DAGLUM	No	---	---	---	---	---
	HARRIET	Yes	flat	2B3	YES	NO	NO
33: SAVAGE CLAY LOAM, 1 TO 3 PERCENT SLOPES	---	---	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
33B: SAVAGE CLAY LOAM, 3 TO 6 PERCENT SLOPES	SAVAGE	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
34F: BRANDENBURG-CABBA- SAVAGE COMPLEX, 6 TO 70 PERCENT SLOPES	BRANDENBURG	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	SEARING	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
35F: CABBA-AMOR-SAVAGE COMPLEX, 9 TO 70 PERCENT SLOPES, EXTREMELY STONY	RINGLING	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
36: VELVA FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES	SINNIGAM	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	VELVA	No	---	---	---	---	---
	KORCHEA	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
	HAVRELOM	No	---	---	---	---	---
	LALLIE	Yes	depression	3,2B3	YES	NO	YES
	BELFIELD	No	---	---	---	---	---
	STRAW	No	---	---	---	---	---



HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
38: BELFIELD-GRAIL CLAY LOAMS, 0 TO 3 PERCENT SLOPES	BELFIELD	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
39: BELFIELD-GRAIL CLAY LOAMS, SALINE, 0 TO 3 PERCENT SLOPES	RHOADES	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	SAVAGE,	No	---	---	---	---	---
	SALINE	No	---	---	---	---	---
	DAGLUM,	No	---	---	---	---	---
	SALINE	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	HARRIET	Yes	flat	2B3	YES	NO	NO
	LAWTHER,	No	---	---	---	---	---
40: DUMPS-PITS COMPLEX	SALINE	No	---	---	---	---	---
	DUMPS-PITS	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
41B: EKALAKA FINE SANDY LOAM, 1 TO 6 PERCENT SLOPES	EKALAKA	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	DESART	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
42B: FELOR LOAM, TERRACE, 1 TO 6 PERCENT SLOPES	FELOR	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	FLAXTON	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
43: LEFOR FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES	LEFOR	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
43B: LEFOR FINE SANDY LOAM, 3 TO 6 PERCENT SLOPES	LEFOR	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	COHAGEN	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
44: REEDER LOAM, 1 TO 3 PERCENT SLOPES	REEDER	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	SEN	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
44B: REEDER LOAM, 3 TO 6 PERCENT SLOPES	REEDER	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	SEN	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	YEGEN	No	---	---	---	---	---
45B: FELOR LOAM, 1 TO 6 PERCENT SLOPES	FELOR	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
46: PARSHALL LOAM, MODERATELY WET, 1 TO 3 PERCENT SLOPES	PARSHALL	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	REGAN	Yes	drainageway	2B3	YES	NO	NO
	BELFIELD	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
47: REGENT-DAGLUM COMPLEX, 1 TO 3 PERCENT SLOPES	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	REEDER	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
47B: REGENT-DAGLUM COMPLEX, 3 TO 6 PERCENT SLOPES	DAGLUM	No	---	---	---	---	---
	REGENT	No	---	---	---	---	---
	MOREAU	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
48F: LEHR-SHAMBO-CABBA LOAMS, 6 TO 50 PERCENT SLOPES	LEHR	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
49B: WATROUS-FELOR LOAMS, 1 TO 6 PERCENT SLOPES	SAVAGE	No	---	---	---	---	---
	WATROUS	No	---	---	---	---	---
	FELOR	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
50B: YEGEN FINE SANDY LOAM, 1 TO 6 PERCENT SLOPES	HEIL	Yes	depression	2B3, 3	YES	NO	YES
	YEGEN	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	CHAMA	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
52B: PARSHALL FINE SANDY LOAM, TERRACE, 1 TO 6 PERCENT SLOPES	PARSHALL	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	BELFIELD	No	---	---	---	---	---
53B: LEHR-BOWDLE LOAMS, 1 TO 6 PERCENT SLOPES	LEHR	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	RUSO	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
54: BELFIELD-DAGLUM CLAY LOAMS, SALINE, 1 TO 3 PERCENT SLOPES	BELFIELD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	RHOADES, SALINE	No	---	---	---	---	---
	SAVAGE, SALINE	No	---	---	---	---	---
	GRAIL, SALINE	No	---	---	---	---	---
	SLICKSPOTS	No	---	---	---	---	---
	HARRIET	Yes	flat	2B3	YES	NO	NO
	REGENT	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
55B: MOREAU SILTY CLAY, SALINE, 1 TO 6 PERCENT SLOPES	MOREAU	No	---	---	---	---	---
	WAYDEN	No	---	---	---	---	---
	DAGLUM, SALINE	No	---	---	---	---	---
	REGENT, SALINE	No	---	---	---	---	---
	BELFIELD, SALINE	No	---	---	---	---	---
	SAVAGE, SALINE	No	---	---	---	---	---
56: PARSHALL LOAM, SALINE, 1 TO 3 PERCENT SLOPES	HARRIET	Yes	flat	2B3	YES	NO	NO
	PARSHALL	No	---	---	---	---	---
	ARNEGARD, SALINE	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	SLICKSPOTS	No	---	---	---	---	---
	BELFIELD, SALINE	No	---	---	---	---	---
57: DAGLUM-RHOADES LOAMS, SALINE, 1 TO 3 PERCENT SLOPES	SHAMBO	No	---	---	---	---	---
	REGAN	Yes	drainageway	2B3	YES	NO	NO
	DAGLUM	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	BELFIELD, SALINE	No	---	---	---	---	---
	DOGTTOOTH, SALINE	No	---	---	---	---	---
M-W: MISCELLANEOUS WATER	MOREAU	No	---	---	---	---	---
	SLICKSPOTS	No	---	---	---	---	---
	EKALAKA	No	---	---	---	---	---
	HARRIET	Yes	flat	2B3, 3	YES	NO	YES
	MISCELLANEOUS WATER	Yes	depression	2B3, 3	YES	NO	YES
	WATER	Yes	depression	2B3, 3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
Hettinger County, North Dakota

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria

FOOTNOTE: There may be small areas of included soils or miscellaneous areas that are significant to use and management of the soil; yet are too small to delineate on the soil map at the map's original scale. These may be designated as spot symbols and are defined in the published Soil Survey Report or the USDA-NRCS Technical Guide, Part II. Areas mapped as water or any map unit that contains one of the following conventional symbols is considered a hydric soil map unit: marshes or swamps; wet spots; depressions; streams, lakes and ponds.

1. All Histosols except Folists, or
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Aquisalids, Pachic subgroups, or Cumulic subgroups that are:
  - a. Somewhat poorly drained with a water table equal to 0.0 foot (ft) from the surface during the growing season, or
  - b. poorly drained or very poorly drained and have either:
    - (1) water table equal to 0.0 ft during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in),  
or for other soils
    - (2) water table at less than or equal to 0.5 ft from the surface during the growing season if permeability is equal to or greater than 6.0 in/hour (h) in all layers within 20 in, or
    - (3) water table at less than or equal to 1.0 ft from the surface during the growing season if permeability is less than 6.0 in/h in any layer within 20 in, or
3. Soils that are frequently ponded for long duration or very long duration during the growing season, or
4. Soils that are frequently flooded for long duration or very long duration during the growing season.

